

## CLAIMS

What is claimed is:

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- 1 1. A method for booting a subsystem, comprising:  
2 retrieving a subsystem boot indicator; and  
3 transferring information to the subsystem based on the subsystem boot  
4 indicator.
  - 1 2. The method according to claim 1, wherein the subsystem boot indicator is located  
2 in a non-volatile storage device.
  - 1 3. The method according to claim 2, wherein the non-volatile storage device is  
2 located within the subsystem.
  - 1 4. The method according to claim 1, wherein transferring information to the  
2 subsystem is performed without involvement of a main system operating system.
  - 1 5. The method according to claim 4, wherein transferring information to the  
2 subsystem is performed over a bus whose width is less than that of the main system.
  - 1 6. The method according to claim 4, wherein transferring information to the  
2 subsystem is performed over a communication link whose bandwidth is less than that  
3 of the main system.

1 7. The method according to claim 1, wherein transferring information to the  
2 subsystem is transferring information to a memory accessible by the subsystem.

1 8. A method comprising:

2 starting a boot up of a system;

3 retrieving a boot indicator;

4 transferring information inaccessible to a subsystem to a location accessible by  
5 the subsystem based upon the boot indicator; and

6 shutting down the system.

1 9. The method according to claim 8, wherein shutting down the system occurs before  
2 a main operating system for the system has substantially started executing.

1 10. The method according to claim 8, wherein shutting down the system does not  
2 shut down the subsystem.

1 11. The method according to claim 8, wherein the location is a memory location.

1 12. A machine-readable medium having stored thereon instructions, which when  
2 executed by a processor, causes said processor to perform the following:

3 retrieve a subsystem boot indicator; and

4 transfer information to a subsystem based on the subsystem boot indicator.

1 13. The machine-readable medium according to claim 12, wherein transferring the  
2 information to a subsystem comprises transferring the information to a storage  
3 accessible by the subsystem.

1 14. The machine-readable medium according to claim 12, wherein retrieving the  
2 subsystem boot indicator is retrieving the subsystem boot indicator from a non-  
3 volatile storage device.

1 15. A method for booting a subsystem, comprising:  
2 retrieving a subsystem boot indicator;  
3 determining from the retrieved subsystem boot indicator whether to perform a  
4 boot; and  
5 performing a requested boot.

1 16. The method of claim 15, wherein performing a requested boot comprises:  
2 retrieving information from a main system storage;  
3 transferring the retrieved information to the subsystem;  
4 storing the transferred information in a location accessible by the subsystem;  
5 and  
6 booting the subsystem from the stored information in the location accessible  
7 by the subsystem.

1 17. The method of claim 16, wherein retrieving information and transferring the  
2 retrieved information is substantially performed by a main system resource.

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1 18. The method of claim 16, wherein retrieving information and transferring the  
2 retrieved information is substantially performed by a subsystem resource.

1 19. The method of claim 15, wherein retrieving the subsystem boot indicator  
2 comprises retrieving a subsystem boot indicator from the subsystem to be booted.

1 20. A booting system comprising:

2 a main system;

3 a subsystem coupled to the main system;

4 a main storage device accessible by the main system;

5 a subsystem storage device accessible by the subsystem;

6 a subsystem boot indicator; and

7 a controller coupled to the main system and the subsystem.

1 21. The system of claim 20, wherein the main storage device is a non-volatile  
2 memory storage device.

1 22. The system of claim 20, wherein the subsystem storage device is a volatile  
2 memory device.

1 23. The system of claim 20, wherein the subsystem boot indicator is accessible by the  
2 controller.

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1 24. An apparatus for booting a subsystem, comprising/  
2 means for retrieving a subsystem boot indicator;  
3 means for determining from the retrieved subsystem boot indicator whether to  
4 perform a boot; and  
5 means for performing a requested boot.

1 25. The apparatus of claim 24, wherein means for performing a requested boot  
2 comprises:  
3 means for allowing a subsystem access to a main system storage;  
4 means for retrieving information from the main system storage;  
5 means for transferring the retrieved information to the subsystem;  
6 means for storing the transferred information in a location accessible by the  
7 subsystem; and  
8 means for booting the subsystem from the stored information in the location  
9 accessible by the subsystem.

1 26. The apparatus of claim 24, wherein means for performing a requested boot  
2 comprises:  
3 means for allowing a main system access to a main system storage;  
4 means for retrieving information from the main system storage;  
5 means for transferring the retrieved information to the subsystem;  
6 means for storing the transferred information in a location accessible by the  
7 subsystem; and

8 means for booting the subsystem from the stored information in the location  
9 accessible by the subsystem.

1 27. A computer based system comprising:

2 a main system with a first storage device, the main system capable of running  
3 a main operating system;

4 a subsystem with a second storage device;

5 a subsystem boot indicator; and

6 a boot up controller capable of accessing the subsystem boot indicator and  
7 initiating a booting of the subsystem based upon the subsystem boot indicator.

1 28. The computer based system according to claim 27, wherein the booting of the  
2 subsystem comprises:

3 means for retrieving information from the first storage device;

4 means for transferring the retrieved information to the second storage device;

5 and

6 means for booting the subsystem using the information in the second storage  
7 device.

1 29. The computer based system according to claim 28, wherein means for retrieving  
2 information and means for transferring the retrieved information is performed  
3 substantially by a main system resource without the use of the main operating system.

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- 1 30. The computer based system according to claim 28, wherein means for retrieving
- 2 information and means for transferring the retrieved information is substantially
- 3 performed by a subsystem resource.